## FOX RIVER PCB CLEAN-UP PUBLIC FORUM

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ORIGINAL

With

CONGRESSMAN STEVE KAGEN, M.D.

TRANSCRIPT OF PROCEEDINGS

DATE:

May 5, 2007

TIME:

12:01 p.m. - 2:15 p.m.

LOCATION:

ST. NORBERT COLLEGE Fort Howard Auditorium De Pere, Wisconsin

PANELISTS:

Dr. Roger Kuhns Jim Hahnenberg, EPA

Greg Hill, DNR

Rebecca Katers, Clean Water

Action Council

MODERATORS: CONGRESSMAN STEVE KAGEN, M.D.

CASEY FRARY

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everyone. Thank you all for being here and

taking time out of your busy schedule to help

make a difference in your community, to help

make a difference not just in the Fox River

health but in the health of everyone living here

and hopefully set a course and a new standard

for America on how to deal with environmental

CONGRESSMAN KAGEN: Good morning,

pollution.

This is a good time to remind everyone to turn off your cell phones and your pagers, especially the panelists. You can answer it some other time.

As all of you know, the Fox River is the heart of our community. Every single one of us here today shares the same goal. We want a healthy river because the health of our Fox River determines our health as well. There can be no separation between human health and the health of our environment.

To clean up the Fox River really requires everyone's effort. As we restore its health, our wildlife will do better and all of us will as well. And as many of you know, I've raised

some concerns about the current plan that the Environmental Protection Agency is now considering.

Two of these concerns include the overall safety and the long-term effectiveness of the so-called capping proposal and the possibility of losing our navigation channel for future business and recreational uses.

I do not believe that capping is the best solution for what is in front of us. We must think about the long-term health and risks and costs associated with capping proposals. It's not just about the short-term costs. It's about the human costs as well.

We understand these facts: First, this is the largest PCB removal project, most aggressive plan in the United States of America.

Second fact is, unfortunately, this zip code of De Pere is a hot spot not just for PCB content but for the incidence of breast cancer among women and also mortality from breast cancer.

Statistics, however, do not produce a cause-and-effect relationship, but there is a statistical association and we must ask a

question: Is this a coincidence?

This forum today is an opportunity for our community to raise questions and concerns about the plan under consideration, about the process and the science of capping. This is an opportunity for all of us to further our input into this decision-making process that will be imminently going forward.

As this process continues, I look forward to continuing to work with the DNR, with the EPA and with everyone else in the scientific community and with those who matter most, the people that live and recreate and work here in the Fox Valley.

It is critically important that our community be involved and well-informed during all aspects of this clean-up process and I would like to let everyone know in advance that I will unfortunately today have to leave at 1:45. I'll be attending the funeral of a fallen soldier, Nick Riehl, in Shiocton. So I'm sorry to have started late but if we carry over just a bit, as moderator, my staff assistant -- and the title officially of Ms. Frary is legislative assistant or legislative director from Washington, D.C., a

graduate of Marquette -- she will take over.

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I want to thank the panelists for being here. Greg Hill, project manager from the Wisconsin DNR, thank you for being here. Jim Hahnenberg, remedial project manager from the EPA in Chicago. Thank you very much, Jim, for being here. Rebecca Katers, Executive Director of Clean Water Action Council, thank you for being here, and for all of your hard work for starting the process of examining the best way forward. And also, Dr. Roger Kuhns, a known expert worldwide in environmental and geological processes who has restored rivers across many different continents.

Thank you all for being here, and the agenda is now in the hands of Casey Frary, who I introduced to you. Thank you.

MS. FRARY: Hello, everyone. What we're going to do real quick is we are going to have each of the panelists give just a brief statement that is going to address some of the comments that the forum is going to focus on, and after that we are going to have a question-and-answer period.

We are going to have two staff members on

each side of the aisles who will have microphones. At the end of the panelists' statements, if you have a question, feel free to head over to one of them. We'd ask that you keep your questions relatively short in nature. I imagine there is going to be a lot of them so we want to get through as many as possible.

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If you are with any organization or a local community leader, let us know that.

When you state your name, if you have a slightly complicated name, if you wouldn't mind spelling that for our reporter, that would be very much appreciated, and other than that, we are going to go ahead, get started. And, Greg, if you would like to start, go ahead.

MR. HILL: Good afternoon. We switch from morning to afternoon real quickly here.

Unlike some of you, I've got two easy names, two four-letter words, Greg Hill. I'm not going to have to spell them.

As the Congressman said, we are lucky to be in a situation where we have the most aggressive PCB clean-up ongoing in the nation. The state is the lead agency on this Superfund process, not a Superfund site but a Superfund process

where for the last seven years or more, we have been looking at data and developing proposed actions to address the PCB contamination which contaminates the food source for humans.

The risk that is associated with the PCBs from this river is due to the fish contamination. We have established clean-up levels based on reducing the exposure of PCBs to those fish and therefore, reducing the exposure of humans.

We originally proposed a clean-up plan that was dredging but with a provision that capping could be included if it could be shown to be as effective, as cost effective and as permanent, both in the short-term and the long-term, as dredging.

I recognize a number of faces in this crowd as those who participated in a comment period back in early December during the formal Superfund process public comment period. And I'm glad to see that you're here again to make sure that all of the information is shared and all of your concerns are addressed.

Let me say that we are advocating this proposed change because we are interested in

getting the best environmental solution to reduce the risk of PCBs to human health and the environment. As I said, it's the most aggressive clean-up of a PCB site in the country. It has the cleanest or the tightest clean-up standard of one part per million, both in the original ROD and in the proposed remedy change. And it is one of the tightest time frames which we believe is critical in removing the exposure to the risk caused by PCBs.

We proposed that, DNR and EPA proposed the

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We proposed that, DNR and EPA proposed the modified plan because we got new information. We found out that there were higher concentrations of PCBs in different locations than we originally thought there were in the original ROD.

We also looked at the existing data from other dredging sites, both on this river and throughout the country, and we determined that dredging alone could not adequately reduce the concentration of PCBs in the surface sediments in the river in a short amount of time.

We found that residuals continued to cause an increased exposure of PCBs to the food chain through the fish to the humans.

We evaluated, just as we said we would in the original ROD, the ability to cap as well as dredge in order to meet the clean-up standard, and we proposed that a combination is the right thing to do.

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The decision is not final. We received comments; we received lots of comments during the formal comment period. We are still evaluating those comments, and I think Jim will describe the process that we're going through in evaluating those comments before we make a final decision.

I noticed as I sat down that there were four questions for each panelist, and I apologize for not having the answers to them because I didn't see the questions before I arrived this morning.

The question, "Is it permanent?" That question has been raised regarding PCBs ever since we heard -- ever since the public heard that they have a long stability lifetime; that they will last for four hundred years.

I think I see some of the faces that were in the crowd when there was a proposal to license a landfill on the Georgia-Pacific property for disposal of some of the sediment that's being

dredged right now just upstream from where we are. The concern was you can't put them in a landfill because it's not permanent. When you have a long-lived substance, "permanent" is a relative term. What we have to do is reduce risk and find an engineered solution that we believe is adequate to reduce the risk and address the risk over a long period of time.

The second question is: "Are there other navigable rivers that have been capped?" And the answer is yes. Now, I'm not prepared to share with you a list. We can provide that to the Congressman following this meeting. But this would not be the first river that was capped in order to address environmental pollution.

"Are you aware of any river sediments contaminated by PCBs that have been remediated by this process?" Yes.

"In your expert opinion as a professional environmental scientist, do you believe that the PCBs in the Fox River should be capped?" As I said, both EPA and DNR have proposed this modification because we believe that it's the best environmental solution to address the

contamination of PCBs in the food chain at this site. Jim?

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MR. HAHNENBERG: Thank you, Greg.

I'll try not to repeat some of what Greg Hill said, but as to some of the questions on the Congressman's list here to address, "Is capping a permanent solution?"

As Greg indicated, we have looked at this before, the proposed plan. Our judgment in that initial process was that we do believe based on engineering and scientific evaluations that caps should remain stable in the river for this project. So we do think it would be a permanent solution, relatively permanent. Nothing is ever permanent. That's not a real good word in a lot of cases, but we do believe they would be stable in the long-term; they would be protective.

And to talk a little bit about the concept of protectiveness, that is EPA's mission really to ensure that whatever we do is protective for human health and the environment. And that is why in the Superfund process, there's nine criteria we have to evaluate for any remedy.

The first two criteria are protectiveness and they must meet all laws and regulations.

For protectiveness, of course that's probably the preeminent criteria, really, so any alternative we determine will be implemented must be protective in the agency's judgment. So it has to first meet those two criteria before we go forward.

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The other seven criteria, five of them are technical kind of things. One is long-term effectiveness, another is short-term effectiveness. The other is implementability; can you do it?

There is a preference for treatment that we always look at and there is cost-effectiveness.

Many people seem to feel that cost-effectiveness is the only thing we looked at in this proposal. But I can assure you it's not. We did look at all nine criteria. The other two, by the way, are community acceptance and state acceptance. They're also important as well as the other ones.

But we did look at all nine criteria, and after we first meet the two threshold criteria for protectiveness, meeting all laws and regulations, then we do a comparison of the other criteria to kind of do a comparison

between the alternatives as to which one shakes out as the best overall approach.

So we weigh in all those factors in our decision-making process. And in that process, Greg indicated we are going through the final stages of our evaluations of the proposed plan and consideration of all the comments that we did receive during the public comment period.

And the Congressman and others have said,
"Well, can't you consider newer comments?" Yes,
we can. In the Superfund process, we do have a
comment period so that we can try and manage
this process and get it done in a reasonable
amount of time, kind of come to a decision. But
that's not to say if there isn't new
information, compelling information that tells
us there is something we should still take
another hard look at, we certainly would
consider that. And that can be even done after
a decision as this really is. A decision was
made, new information came forward, so we do
reconsider the original decision and then we can
make changes from there.

So it is possible to consider that and we will certainly be looking at the information we

are getting currently before we make the final decision.

Just to mention that process again, what will result once we are done with that process is we will have a decision and that will be documented in the Record of Decision Amendment in this case which is a change to an earlier decision.

Along with that we will also have what we call a responsiveness summary. What that is is we have a written response to every comment that we have received so people will have answers to all the comments that they have given to us, and we will have a written response to every comment. We combine comments which are similar, but we respond to every comment, every substantive comment we will respond to and consider that in the final decision.

As to some of these other questions here on the list, "Other rivers, have they been capped?"

As Greg indicated, there are a few where that has been done. We want to gather some more information on that, which will be forwarded to the Congressman and others if they are interested. We don't have all that information

together today, but we are looking at that.

There are a couple projects on the East

Coast, a couple of projects on the West Coast

that we're going to try to get some more

information on. There are a number of other

projects, capping projects, around the world and

in this country that have been done, other kinds

of projects that have been done in various bays

and harbors and estuaries, some marine

environments, some freshwater environments, so

we do have those projects as well that we are

looking at.

And last question on the list here is, "Do you think that the Fox River is a project that should involve capping?"

As Greg indicated, in the proposed plan, we did determine that this would be an appropriate mix of remedies. And one thing I did want to mention is that the proposal we have in the proposed plan is not just a capping remedy. It's a mixture of dredging and capping. It's about 50/50.

The original remedy was about 95 percent dredging and 5 percent capping. It would have been along shorelines which would be unstable if

you dredge those areas. There would have been some small amount of capping in the original remedy.

This remedy would be about 50/50, roughly, in terms of how much we would cap and how much we would dredge.

The way we approached it for this proposal was to look at areas that made the most sense to dredge, the most sense to cap. We looked at this in great detail to try and determine which areas would be best suited to each of the alternatives.

As Greg did indicate, this is the largest environmental sediment project that has been done in this country to date. And the dredging portion of this remedy, which will be around three and a half million cubic yards in the proposed plan, would still make it the largest environmental dredging project that has ever been done to date. It's even bigger than the Hudson River which you may have heard about, so it would be still the biggest dredging project for environmental reasons that has been done in this country.

That's all I have to say, and we will have

more questions and answers, I'm sure. Thank
you. Rebecca?

MS. KATERS: My name is Rebecca

MS. KATERS: My name is Rebecca

Katers. I'm executive director of Clean Water

Action Council which is a local citizen group

that formed in 1985. One of our prime issues

from the very beginning was the clean-up of the

Fox River, so we have been involved all along.

I wanted to speak to partly the process as well as the issues here. It's important to recognize that for the past 21 years, since the beginning of the Remedial Action Plan process that produced this in 1988, the past 21 years, we have had the voluntary cooperative approach to solving this problem; 21 years.

In 1997, Superfund was suggested as a way of trying to speed up this process through actual law enforcement but instead, the state insisted on the voluntary cooperative approach.

And for the past 10 years as a result, all of the meetings have been secret. They've been closed-door meetings with industry, between the industry and agencies, coming up with drafts for us to look at. Each draft gets progressively worse until we now have essentially an industry

plan written by industry consultants, overseen by an allied industry, Boldt Construction from the Fox Valley.

This is an industry plan. This is not an independently produced scientific document.

It's a very one-sided approach behind closed doors. We were not allowed to send our expert. The media were not allowed to observe. We had no input into what was going on in those secret meetings as they hammered out the technical details of this issue.

It's very important to understand any time there is an issue of this complexity, there are going to be serious scientific debates. And this debate was restricted to one side only, the corporate side only. So it is not surprising we ended up with a plan that industry has been pushing for for 20 years: Capping.

I think it's important to recognize that it's not too late. Even though many of us are anxious for progress, we also recognize that we don't want the wrong kind of progress. That would be a negative. It's not too late to reopen and examine these issues carefully. So we are extremely grateful to Congressman Kagen

for initiating this process. And it's a breath of fresh air to have a congressman, an elected official who is actually listening to citizen concerns. We have not had that impression up to now.

I'd like to respond to a couple of comments made regarding the criteria. There are nine criteria regarding a Superfund-type process. We are in a pseudo-Superfund process right now.

The long-term effectiveness is one of the key criteria. The DNR was quoted recently as saying well, they have to go with the least-cost option. That's not true. They also have to look at long-term effectiveness, trying to find permanent reductions in risk. Treatment is supposed to be a high priority, not just landfilling or capping but actually detoxification of the more serious level material, and they're supposed to be looking at annual maintenance cost into the future.

They're only looking 40 years in the future with the capping plan. We know hundreds of years have to be accounted for. These caps are going to have to be watched forever. It's a large area scattered in the last seven miles of

the river. It will be very difficult and costly to maintain and monitor those caps on a regular basis, but that is not figured into the costs.

That's a serious concern.

Overall protection of human health and the environment. We have already demonstrated that on Little Lake Butte des Morts, the upper reaches of the stretch of the Fox River.

They've had three years of very successful dredging, disposal of contaminated sediments; three years.

They've already demonstrated this technology and yet they're telling us that we have to go with an untested technology. Regardless of what they say, there is no other river of our type in a northern latitude with a lot of ice and freezing issues that has been capped for any length of time. There are some that are being capped right now but they have not withstood the test of time. And that's the key that we're most concerned about. Sure it will work great in the short-term. You're going to get some very rapid results. You'll get a great clean-up in the short-term. But what will our kids and grandkids say when the caps start failing and

spilling the material back out in the system again? That's the long-term effectiveness that we need to be concerned about.

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I think there are two issues that are being confused by the agencies. A comment was made that they don't want to leave PCBs behind on the surface sediment. Well, I think everybody agrees with that and after you dredge, yes, there will be some residual on the surface. It temporarily is going to be a little more contaminated on the surface. So in those cases it might be reasonable to lay some sand to temporarily keep that suppressed until the system starts to recover.

But that's not the same as the type of big caps that they're talking about, burying tens of thousands of pounds of PCBs under caps. Those massive PCBs is what we want to get out of the river. The large volume has to be removed in order to get a permanent solution here, and that is not happening with capping.

I'll conclude with that except just to say that I appreciate your being here. These questions are important. The Congressman is asking excellent questions and I hope you will

all support his efforts. He's getting beaten up by a lot of people for this and we need to show support for him. Thank you.

MS. FRARY: Last but not least, Dr. Roger Kuhns.

MR. KUHNS: It's a honor and a privilege to be here, and I mean that because this is an issue that is not just local. We have this kind of problem on rivers not just in the United States but elsewhere as well. So if we can innovate and come up with a long-lasting, truly a permanent solution, then the Congressman can take this to Washington D.C. and we can apply it to other places because you never know where your kids are going to live.

PCBs are persistent and long-lived compounds. And what is compelling about a new piece of information -- and I think we need to explore that a little bit and I hope you have some questions on that -- what is a new piece of information? And if that piece of information seeks a permanent solution or we have learned something new about the river, what would happen if we waited two years and studied the river again? What would it look like?

Rivers are dynamic systems. Rebecca just mentioned what happens if a cap erodes? Let me take you through a storm event, an unusual storm event, say a thousand-year storm event.

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Typically, an engineer for a storm water management plan will use a two to three-year storm event to look at the basic behavior of a river and a hundred-year storm event to plan for a flood. But we know this river has seen larger floods than that. All rivers have.

So we put a cap in and we are going to call it permanent. This cap has rock on it, sand on it and a certain thickness of PCB-contaminated sediments underneath. What will happen? First of all, you could bury it with more sediment and not even know where it is in 10, 20 or 30 years. But you could also start eroding a portion of the edge of it in one storm event, expose and transport that contaminated sediment in the same storm event, and then bury that part of the cap as the water starts receding and not even know that that cap has been damaged.

This kind of erosion, deposition, redeposition, happens in rivers all the time.

And this is why the modeling that has been done

is really -- it's brave, good work -- this is
not a small, trivial thing that these guys have
tried to do and we must commend them for trying
that because we learned a lot of things about
the Fox River in this modeling.

But the thing is, there is a great
uncertainty. And that means it's not permanent.

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I'm a geologist. I've been working on rivers for 30 years. You can't believe some of the storms I've seen, and you can see boulders this big moving and you can hear them in some big storm events. You hear them roll over, clunk, clunk, clunk. It's amazing the power of

water when you have an unusual storm event.

We cannot use that word "permanent" if you're

Now, are we going to have that kind of thing here? Here is something to consider. Some of the reviewers said that not all of the tributaries that empty into the Fox River, the volumes of water that come in have been adequately considered in the volume for the cubic feet per second flow of this river.

One of the things we see as a geologist and ecologist who works on restoration projects --

we see this all the time -- we see flood sequences getting bigger in urban environments. Why is that? As the Fox River continues to develop, it will create more impervious surfaces. This means more water will end up in the Fox River which gives a faster volume rise during a storm event. That means if we don't anticipate this in a model -- and it has not been anticipated in this model -- we have a model that is inaccurate. That means we have no permanent solution.

So the permanent solution, really, as
Rebecca said and as many people have said, is
you've got to get the stuff out. There is
really no other way to put it. Then we treat it
on land where we don't have the uncontrollable
hazard of a water environment.

This is more expensive. I've worked on dredges. Dredges are tricky things. This is more work. But when we have something as persistent and as dangerous as a PCB compound, all 209-plus, we really don't have a negotiating point here as far as the contamination in human health and the environmental health is concerned. The PCB doesn't care what it's going

to do to us. It's just a compound, so we have to get it out.

And that's why we really can't cap this. I have never seen a capped river system that has had the longevity of lasting and surviving big storms. There are capped river systems, systems that have pollution in them that has been capped. Not all of it is PCB pollution, by the way. And these were done usually for cost and expediency and in some cases they're a little older before we fully understood what's going on.

But PCBs are different. They're persistent. We don't know how long they last, and Jim and I were just talking about that. What is the half life? You can't find anybody who can say it's a hundred years or five hundred years.

So what's going to happen to the Fox River in five hundred years? Two hundred years? Fifty years? We really don't know. And modeling is a tricky business.

The questions that have been asked are good questions. And so obviously, the first one is:
"Is capping a good solution?" I've got to say no, it's not. It's not a permanent solution.

And if we look at other navigable rivers where this has been applied, and also the third question, "Are you aware of any river sediments contaminated by PCBs that were remediated by this process?" I have the same answer: None that I know of that have the longevity to confirm that they can be a permanent solution. So you can't take an example that's, in essence, out of context. We have to compare apples with apples.

And Rebecca is also right in saying we are

And Rebecca is also right in saying we are in the northern climes here. We have other things besides just water. We have ice to worry about, okay.

So these are key things that we need to consider in making a well-informed decision. So with the knowledge of what can happen in one storm and with the uncertainty of a model and with not really good, long-lasting existing examples that we can go to, we have a problem.

This will cost more tax dollars. Nobody wanted the PCBs to be there but it is our responsibility now to get them out. So we have to learn how to manage this and we have to move ahead. So I would say that capping this stuff

in the river is not a solution.

MS. FRARY: I would like to thank all the panelists for their comments. Just a couple quick things. I know this is an issue that people feel very strongly about on both sides of the issue.

This is a forum to get some information to answer questions. Keep that in mind when asking questions. I know people are passionate about it, but let's keep it on the up-and-up.

Also, if you would like to direct your questions to the whole panel or a specific panelist, if you could when you ask your question, let them know that as well. That would be great.

If we can have the two staff members come down, get the mikes. We're going to have questions on this side and this side so if you would like to ask a question, feel free to come to one of those two sides. We will get the questions started.

I think we have our first question over here, so we will start on this side.

MR. KRUEGER: Thank you very much.

My name is Jack Krueger. I'm the vice chair of

the Brown County Board of Supervisors. I'm not a scientist.

The county board was faced a couple years ago with making a decision of whether capping would be a viable solution. And we were presented with facts from industry, DNR, that they merely wanted to look at the viability of capping. At those information meetings we were promised a public hearing. I hope this isn't constituting a public hearing.

At the same time, I want to talk about how I came to my decision, not being a scientist, on capping as not being the solution. And it kind of goes back to how an everyday "Joe Blow" who is not a scientist comes to these decisions which I am charged as an elected official to make: Accountability. That's what my dad taught me, and he called it tough love. He held me accountable for making bad decisions.

Bad decisions have been made. Mistakes have been made, mistakes by the industry back 40 years ago or more that have to be held accountable.

I understand the scare tactics. Many of the things that have been told us is that it's got

to be cost effective. Where do we draw the line between cost effective and human beings' health?

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As to the navigability of our river, we have been told that the lock system will be restored. We are again going to have navigable waters all the way to Lake Winnebago. The six feet of water in normal conditions -- not low water conditions, in normal conditions -- is not navigable for many of our recreational boats, to say nothing to the fact that if the European model of using our waterways as freight carriers comes about, how would we use our Fox River as a navigable waterway for industry?

All of these have not been answered. For those reasons, I voted against capping as a possibility back then. I've maintained that. was not in the majority. The majority of the county board voted in favor of it. It's what somebody here today alluded to as what's important, our community, community support?

When that vote was taken, there was very, very little information given but we were assured that this was not a final decision on whether we supported capping or not. We were assured this was not a final decision.

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For that reason, many of my colleagues on the county board did support it in looking at it. We were assured a public hearing would be held. That's never been done. Yet today, we hear the DNR and the EPA saying it's a possible solution that they are willing to go forward with if they have community support.

I haven't seen that community support. This is about what my dad always said was leaving a good legacy behind us; a legacy.

I'm 68 years old. What happens in 50 years is probably not going to matter directly to me. But I do care about it for my seven kids, 14 grandchildren and one-and-a-half great-grandchildren. I care very deeply about it.

I've never been able to swim in the Fox
River at 68 years old. I did swim in the East
River and got my backside tanned for that.

It is possible for us to clean this river, to have it be a healthy river, to have it be a viable option for shipping, for commerce as well as recreating.

I listened to a boater earlier this morning saying his boat takes more than six feet of

water. How could he possibly get up the river?

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Ladies and gentlemen, I just ask you and this panel to look at all the facts, listen to the people.

There is so much mistrust in government today. Becky alluded to meetings being held in closed session. It's not how government has to work, nor should it. We need to open this up and let the people be heard.

I certainly want to thank Congressman Kagen, his contacts with me. Senator Rob Cowles is up there who has continually, continually in all his terms in State Senate has been fighting for our environment. I respect him immensely.

Thank you.

MR. ACKER: My name is Bill Acker, last name spelled A-c-k-e-r. At the last meeting, I asked a question of what is the velocity of water that would start to move the cap? And I was promised an answer at that meeting and I have not received an answer, have placed phone calls to Mr. Hahnenberg to remind him that I have not been given an answer. We talked it over. We both agreed that there are a couple of different cap designs. I said, well,

then give me the maximum velocity for each of the caps; still have not been given an answer on that.

Obviously, this is one of the many important issues that were discussed here today. And certainly if this cap is protective, we want to make sure that that cap is not going to move in these storm events and so we have to know, what velocity are they going to move at? I would like to know why I haven't been given an answer. Thank you.

MR. HAHNENBERG: I do apologize for not having given you an answer yet. I will do that. We are going through all the comments now in that process so we'll have that information for you.

MR. KUHNS: One of the things in looking at cap stability in any aquatic situation, too, if you're given just a velocity in cubic feet per second, this is a number of what might move a piece of sediment, a rock, a cobble, something like that. But a cap is not so simple a construct because it has edges. It's got a top. You can erode the edges.

And one of the things that happens -- and we

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have seen this in the natural environment in river systems already -- it's how we learned about it was by watching rivers.

As you see a bank erode, and I'm sure you've seen this even on the Fox, you've seen it where it cuts under the bank at times and if you stand on the bank, maybe it will fall in. So you can have some really big chunks of rock on top of a cap, and that's not where the river is going to move. The river is going to come over here. The river is like a teenager. It's going to take the easiest path out of the house. So what it's going to do, it's going to start washing that finer-grade sediment away off the edge and that cap starts to become unstable.

Again, this is a very difficult thing to track under water. I have done side scan sonar, bottom remote sensing surveys of rivers and oceans and lakes, and you can't always see this stuff. So the question, specifically, Bill when you get that number, put this question to it, is uncertainty enough of a reason to say don't do this?

MR. ACKER: I was looking for feet per second to tell us when that cap would start

to move, whether it was on the edge or whatever. Thank you.

MS. LEFEBRE: I've lived on the Bay of Green Bay since 1971. I'm going to give you just a little history of what happened to us there, then I've got a question for the DNR, especially. My name is Kathy LeFebre.

As I said, we bought this house in 1971. In 1973, there was a flood. It was considered a 20-year flood and it happened on the weekend of Friday just before Easter and the rest of the city experienced a snowstorm.

We had to leave our house. Actually they had to carry us out on their backs because the vehicles flooded out and it came in about two miles into the city, almost two miles and it did a lot of damage.

When we got back to the property, it was amazing what the water took. It took about two feet of our land along the water. There was no dike at that time. People had rocks out there. It had moved the rocks. They were over our backyard. There was a big tree in our backyard. One house down a little farther, they had a huge tree that went right through their house, really

destroyed their house. It was amazing what happened in this.

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I was home alone and my husband was at school, and they had announced on the radio they were closing all the bridges because the water in the storms when it comes, it doesn't just wash up onto the land, it went up the river and up the river quite far, closing all the bridges down. So I called and said you've got to let him out, I'm not going to be here alone with a little girl.

And what I want to say about this is that this river and the bay can throw some awful, awful storms, the bay can when these winds come in, and we haven't had one of these storms in years. It hasn't happened. So we're just waiting for some big storm to come in. It might not be classified as a 20-year storm.

So my question is after we got back, there's all this dry mud on our lawns. We had it, neighbors did. I don't know how far in the sediment was deposited. We are out there with our hands pulling all this dried mud off. This stuff was full of PCBs. We didn't know it. I'm informed that the DNR knew there was PCBs out

there. I don't know if the EPA knew. Why weren't you there? Why weren't you there testing it, telling us not to touch it?

I've had breast cancer. I'm almost a nine-year survivor. The reason I survived my cancer -- I was one step from being dead -- the reason I survived is because I'm all German.

And you can tell a German something but you can't tell them much. We are very tough.

But my neighbor wasn't lucky. She died.

She had breast cancer, it came back and it killed her. It was awful what she went through. A few houses down, both the daughters in that house had breast cancer. Breast cancer is a big, big issue for us.

Why weren't we notified? Could you tell me why you didn't tell us, you didn't come and check it out for us to let us know how hazardous this was, if it was hazardous? We don't know. I had a little daughter. I'm concerned about her now. Is she going to get breast cancer? Because she was around -- she was playing in the stuff. Can you answer that for me, please?

MR. HILL: I'm not sure what the question is. You said this was in '73? I think

the State of Wisconsin learned about PCBs as being a problem in the Fox River, in the Sheboygan River and Milwaukee River in late '70s when we issued our first consumption advisories. Whether or not we knew whether or not there were PCBs in the bay sediments, I can't tell you because I was still an undergrad in college so I can't be responsive to what was or was not done by the agency before I started working with it. And Jim wasn't working at EPA at that time, either. So I'm afraid I can't be responsive to why we didn't respond to that.

I can tell you that the proposed plan is meant to reduce the pathway of PCBs to the citizens of this area from this point forward. And we're looking at doing it in a way that is most -- the most aggressive approach in the country, in a way that we believe can be engineered.

Jack, you said -- you referred to your dad a couple of times. My dad was a professional engineer who thought he could design anything. And for Mr. Acker, the idea of trying to tell you right now what the design flow will be, that's a design question. We don't have that

answer right now because we're not designing yet. We are looking at the concept of capping in combination with dredging.

The design phase is the next step that says if capping is allowed, what is the correct design criteria for designing that cap to consider water flow, ice flows, crop wash and many other factors that can reduce the stability of a cap? Those are all things that would come if we make the modification as proposed in the plan.

MS. LEFEBRE: I'd like Becky to answer this.

MS. KATERS: I'd like to say in either '71 or '72, the DNR issued a report by a man named Stan Kleinert on the PCB problem, a very formal, lengthy report, so they should have known and they didn't do anything. And unfortunately this happens a lot. The government is very slow to respond to public health risks like that.

MS. LEFEBRE: If you knew in the late '70s, why did you put Kidney Island in, put all the PCBs in there? You're not taking care of it, either.

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MR. HAHNENBERG: I would like to address one question that was raised in terms of -- it may be your exposure to that event. I don't know what your exposure was. I can tell you the risk assessment that we did for the Fox River, for the concentrations from the Fox River that we have seen, the risk assessment tells us that really, the significant risks from PCBs are related to consumption of fish. Direct exposure from mud, that kind of thing, short-term exposure particularly really does not cause a significant risk to an individual. PCBs, the concentrations, using a really high concentration, I don't know. But the concentrations observed in the Fox River, the risk assessment tells us that that really isn't a major concern in terms of what the risks might be to an individual.

MS. FRARY: If I can remind people, if we can try to keep it to questions. I know again there is a lot of passion about this issue, but if we can try to limit some of the speeches and try to focus on questions so we can get through as many as possible, that would be great.

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MR. SAPERSTEIN: I have a series of inter-related questions. Why didn't you know back in about 1954 the paper companies started using PCBs? Why didn't you know that in 1969, the U.S. Navy refused to use PCBs in their submarine fleets because it was considered to be too toxic?

Why, you mentioned, didn't you know by 1977, '78, the production of PCBs were banned in the United States? They had been banned in Sweden in about 1970.

Why didn't you -- I'm saying you specifically may not have been part of the DNR. You specifically may not have been part of the EPA. But you cannot pretend that the EPA and the DNR were not aware of these things. And they were aware of the fact -- the fact -- that PCBs cause cancer in animals and are regarded by the EPA as a bio-accumulative carcinogenic chemical compound. Why didn't you know that when the lady asked you? And you pretended that you didn't know that.

You pretended that you didn't know that there might be somewhere between 600,000 to a million pounds of PCBs potentially in the

sediments of the Fox River. And why do you keep telling us that this is the grandest, biggest remediation program that exists when you know in the Hudson River in Region II of the EPA where GE has caused more contamination then any other company — than any other company — there is a program that involves only dredging. Why don't you know that and why don't you admit that?

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And why don't you know that in the Grasse
River in New York under the auspices of Region
II and a project manager by the name of Young
Chang, who I've talked to directly, that capping
of the type that you're proposing with porous
rock, sand and gravel failed, and it failed
after about a year and a half because of ice
formation and high velocity underwater
turbulence that did, as Dr. Kuhns said, erode
margins and sucked the PCBs, sucked the PCBs out
from under the rock because of pressure
gradience.

Why don't you admit these things? There are no successful ice-covered rivers that have been capped and there is no experimental work to prove it. Your models --

MS. FRARY: Thank you for your

question.

MR. SAPERSTEIN: I'd like one last question. How can you say that a model, arithmetical model tells you reality? I'm an engineer. I've worked with models. But one test is worth a thousand expert opinions. So don't tell me that a model tells the whole story. It is impossible unless that model exactly duplicates a real condition, and there has never been a test, to my knowledge, that duplicates the conditions that exist on the Fox River. And I believe that you're misleading the public in proposing capping.

So if you can answer those questions, I would be very grateful. My name is Zalman Saperstein, 3155 Gibraltar Road, Fish Creek, Wisconsin. And don't forget the Bay of Green Bay. We have PCBs up there, too.

MR. HAHNENBERG: The question about the history of the agency's understanding of PCBs, I can't answer that. I wasn't around. Well, I was around but I was like in high school, but I mean, I don't know what happened then with the agencies specifically.

On the history of the PCBs, I do know that

PCBs were banned in the '70s by EPA, and as time went on, it became more and more -- people became more and more aware of it as an issue and as a concern. Earlier on it was a gradual awakening of that concern, so in detail I can't answer all those questions in terms of history.

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I can answer some questions on the Hudson River. We do know it is a large dredging project. We do know they are removing a large quantity of PCBs there as planned. It hasn't been done yet, but we're aware of that and we have considered that and what we're planning -- we will have discussions with people on those projects as well, so we are aware of that. That's an option for remedy. That is a large portion of what the proposed plan is for this as well. A large portion of it is dredging.

The Grasse River, I'm familiar with that project a little bit. I'm aware that it was capped. That is one of the projects that we were thinking about and we were planning on getting more information on.

But I'm aware of a problem they did have on the one cap they put in there where there was ice scour -- not ice scour directly but also

actually scour from the water flow under the cap, under the ice, so it did damage the cap there. And that was a matter of the issue of ice scour, potentially things relating to ice scour.

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We did look that in the Fox as part of our development of the proposed plan. In that development, we had an ice scour. We looked at the Fox River specifically to make a determination.

The guy who actually studied the Grasse
River project on that issue, he did look at this
and he did look at the history. He looked at
the different features along the river that
would indicate whether we might have potential
for ice scour, ice damage to a cap.

Conclusions from his evaluation was, for most areas of the Fox River, that isn't a major concern. It's a different kind of river and given the physical conditions and characteristics of the Fox River, it was not thought to be a major concern except there was another type of ice which does have potential to form in certain portions of the Fox River, particularly below dams where we have turbulent

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waters. Those were areas where we will not be capping. We will be dredging because of the potential for ice damage from frazzulence.

So in terms of the modeling that has been done, these models have been calibrated by modelers. That means they look at different laboratory results and results, other projects. They have looked at the -- tried to relate to the physical reality of what can happen to sediment related to a cap which is sediment movement from ice flow or water flow, so they have looked at that issue but just factored in the development of models, so that is looked at.

MR. SAPERSTEIN: I don't know, when you say "they", if anybody --

MR. HAHNENBERG: The model --

MR. SAPERSTEIN: In response to what you just told me, I would like to ask another question because it's only fair to do that.

MS. FRARY: There are a lot of people who have questions.

MR. SAPERSTEIN: Please, I've got to, because he said something that conflicts with an EPA report that was issued about a year ago. He is misleading us.

MS. FRARY: If you would like to write down a question, we will be happy to have him answer.

MR. SAPERSTEIN: He is misleading the whole audience by his answer and I would suggest that you read and ask you to read a document that was published by the EPA in December 2005. It is entitled, "Contaminated Sediment Remediation Guidance for Hazardous Waste Sites," and in Section 3.1.3, it is entitled, "In-situ Treatment and Other Innovative Alternatives," and in that paragraph in December 2005 prepared by the EPA, it simply says --

MS. FRARY: Sir, you --

MR. SAPERSTEIN: -- that you cannot use capping and they don't recommend it. Read that paragraph.

MS. FRARY: Sir --

MR. SAPERSTEIN: Read that paragraph and tell these people that they are misleading us.

MS. FRARY: Sir, we have other people that would like to speak. Thank you very much. Again, let's try to keep our questions really focused here. There is a lot of people that

have some questions, and we want to get through as many as possible. Go ahead.

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MR. STROMBORG: I'll try and keep it to a couple of questions. Ken Stromborg, S-t-r-o-m-b-o-r-g, and I'm a citizen of Brown County. And I want it clearly understood that what I say is my personal opinion and in no way reflects the position of any organization or agency with which I may be affiliated.

I've been editing my question as we hear things happening here, and I think really fundamentally it has to do with this issue of permanence where it sounds to me like we're redefining the word. "Permanent" means something to me, and now I hear that "permanence" is relative, so since we are talking about a brand new strategy here, one that I think I can only call the Chernobyl Strategy. You're going to create a sarcophagus in the river or a multitude of them; sarcophagi, I suppose.

Would you please address three inter-related questions? First of all, tell me where in human history human beings have piled up sand, gravel and rock in a high energy environment like a

river bed or wave action environment and had those piles of rock resist the erosive forces for hundreds or thousands of years? I could think of on land situations, the pyramids and things like that, but I can't think of a situation in an aquatic water environment. So that's question number one.

Question number two has to do with how you're going to detect failure of this cap? We have heard almost nothing about even a plan for monitoring and keeping track of this stuff either in the bay or related to the cap itself. And I'd like you to address what plans are underway to keep track of the integrity of the cap.

And then finally, what institutional and financial arrangements are going to be written into this plan to fix the problems that will occur?

And I have in mind particularly something that hasn't been addressed yet and that is the probable decrease in lake levels of five to ten feet. I don't think that's an "if." That's a "when." I've seen lake levels go down five feet in the last ten years. Global climate models

say it's very likely to happen again. When you decrease lake levels, you're forcing the river to flow through that dredged channel that exists now where your sarcophagus is going to be.

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In effect, you've created a hydraulic mining machine. As I recall -- and Dr. Kuhns could probably speak to this -- the force and erosive capacity goes to the 6th power of velocity. If you force that river into that narrow channel, it's going to erode. And what I'd like to know, how are you going to detect it and how are you going to pay for fixing it? And who is actually going to do that? Because I really don't want my grandchildren to inherit more financial responsibilities on top of what you're piling on.

MR. HILL: All good questions, Ken.

The first question about where has it been successfully done where man has armored a flowing river system, we'll look, like we said, at rivers that have had remediation projects.

The thing that comes to mind is based on some of the new information we got during the previous sampling where we found that immediately below the De Pere dam, which I think

most people would agree is a pretty erosive environment, following the last dredging of the navigation channel 35 or 40 years ago, there are deposits of PCBs that have been covered with six or more feet of cleaner material. Which to my mind -- and Dr. Kuhns, you can speak to this, too, I'm sure -- Mother Nature has capped those to the level that over the last 35 years, they have been buried and separated from the aquatic environment. It's that kind of data that would lead us to believe that we can engineer a cap and design a cap that is protective in this environment.

And the question of whether or not it will be protective into the future gets to be how are you going to monitor it? And the level of monitoring that will be required will be directly related to the assurance that the cap is structurally protective and installed to a point where, you know, it will be based on the level of confidence we have in the stability of the cap.

And as far as the long-term commitment or capability of monitoring and paying for either monitoring or repair, that's a provision that

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will be included in total cost estimates. It was estimated as part of the BODR. That was the basis for the proposed plan. But it will be a commitment by the responsible parties to provide the funds for the long-term monitoring and maintenance.

And again, the amount of money that will be required will be directly related to the conservativeness of the design and the ability to construct according to that design.

MS. FRARY: Jim, do you want to talk little bit about how they're going to be monitored?

MR. HAHNENBERG: Sure. Well, I'll let Roger.

MR. KUHNS: Greg's comments about the dam example which is what happens when water goes over a dam, it can scour. Basically a scour hole is a fungible-type thing. You can put a lot of sediment in these things and they can be buried by another storm.

The thing to remember about a river is that when you deposit sediment in a place where there wasn't sediment, that means that the sediment that was there before there was a void was

moved. Does that make sense? Because it's dynamic. A plunge pool after a dam is a very specific engineering situation and it's usually one engineers try to avoid because it undercuts and under-erodes dams.

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If you go to any of the large dam projects, you can see they take extraordinary care, spend huge amounts of funds and have poured tons of concrete to protect these areas.

What we are learning in ecology in the last 10 to 15 years is that there is a lot better ways to manage stream restorations, for instance, than engineering it with rocks and concrete.

So one of my concerns is that if we think we can engineer this in a river that we don't fully understand, my experience is that everywhere without exception -- and the gentleman who asked can you show me a river where we have got a cap that has stood the test of time -- there isn't one by the way, that I know of.

If we try -- if we think we can engineer this thing, in every example that I know of, there has been indications of failure or failure. And we have of course seen this on a

massive scale in places along the Mississippi River floods, breaking the levy, and these are sometimes dual levy systems that have failed and also levy systems like Katrina, things like that in New Orleans, so sometimes we just don't anticipate that when a series of things occur together in nature, they give us extraordinary events and this is the concern here, which is why in my opinion, capping is not a viable solution because we can never fully understand what this river is going to give us.

And because of that, we can't say anything is permanent. And because we can't say anything is permanent then we shouldn't do it. We should get them out, have got to get the stuff out -- plain English -- and remediate it in a non-aquatic environment so it's remediated, not packed away, and that's a difficult thing to pay for and to actually achieve.

But it's the only way, in terms of my experience as a geologist, hydrologist and ecologist, that's the only way to fix this, and I wish it was not a billion dollars and half a billion dollars price tag, but the fact is, it's there. We have got to fix it. So the science

behind this is really important, and if a scientist goes forward with a decision when he or she knows that one of the answers was "I have a great uncertainty," then that person has left the scientific principles behind and gone to opinion and desire, so we have to really be careful with this, guys. We don't know what this river is going to do.

MR. HAHNENBERG: Just real briefly on how the cap is going to be monitored. The details are still being developed. I assume going forward, that would be determined in the final plan.

What that would be, the cores would be taken in the cap to make sure we see the cap still being there. There would be some chemical analyses in the cores to make sure PCBs or chemicals weren't migrating through the cap.

There might be similar-type surveys to determine that, other ways to determine the cap is present. That would be done on a regular basis as part of the Superfund process whereby we have, at a minimum, five-year reviews to make sure the remedy is continuing to be protective, so this is part of the Superfund process to make

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sure when contaminants are left behind that we monitor that and we report on that and evaluate that to make sure that remedy has maintained its protectiveness.

MS. FRARY: Your name and your question, please?

MR. THOMPSON: My name is Dave
Thompson. And my question is, what is the ratio of funds budgeted for research on removing sediments from PCBs versus the cost of remediation and how many of these are accessible? I'm a professor at Lawrence
University. I'm interested in how much of these funds are accessible for people like myself for competitive grant writing and where would one go to if one wanted to do that?

MR. HAHNENBERG: I'm not sure offhand, but I can check on that for you. Let me get your name, e-mail. I'll let you know.

MR. THOMPSON: Thank you.

MS. SCHABER: My name is Penny
Bernard Schaber. I've been involved in this
process for 21 years like Becky has been
involved. I'm been part of the Fox Valley
Sierra Club as one of their representatives to

discuss this concern. And I hear that there was not a decision made but I feel that the decision had been made and that my voice has been ignored.

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One of my questions is health concerns should be number one. Beyond cancer risks, we have fertility, genetic and developmental concerns, also. Have health studies been done? Have epidemiological studies been done in this area? If so, where are the results and what have they shown us?

My other question is given the answers that I heard today, will we have those same answers in 50 years like, "I was not here. I did not know. I didn't do the project, so I have no responsibility"?

MR. HAHNENBERG: I can't speak for people from 50 years ago, but speaking for myself now, I can tell you that we do take responsibility for a decision, whatever it is, that we are making. And by the way, I'm not the one to make that decision but I certainly have input into it. It's the EPA management that would ultimately make that decision.

As to the health studies, the health studies

that have been done, I don't believe that's been done as part of this process. There may be some out there but it is typically done with Superfund projects. It can be done. Usually it's sort of a general population study. They don't go in, do specific like research kind of things. It is often done, but as far as I know, it hasn't been done. Yeah, as part of the baseline risk assessment that is looked at, certainly, and the research is looked at. That would be encompassed in that assessment, but not a particular specific study in terms of being tasked as sort of a major epidemiological study for the Fox.

MR. ABBOTT: I'm Lynn Abbott from
Green Bay. Relating to Ken's questions, is
there a specific "Plan B" in case there are
problems with the caps? I mean, are you going
to remove the cap and dredge or are you going to
add more cap or whatever? And who is going to
pay for it? And would there be an escrow set up
in case the company no longer exists or gets
merged or whatever?

MR. HILL: Let me answer in a reverse way. Yes, there would be a long-term funding

provided for both monitoring and maintenance, and under Superfund there is a five-year review of the effectiveness of the remedy. If it was found that the cap is eroded, the plan, the proposed plan, is that it would be evaluated to determine whether or not the cap could be repaired, if it would need to be reinforced, or if it needed to be removed and dredging was the right thing because it wasn't engineered in the first place -- correctly in the first place.

MS. KATERS: Officially in the plan, isn't it only 40 years of actual funding?

MR. HAHNENBERG: Cost estimates actually, I believe, consider a hundred year's funding, but that's kind of secondary in a way because the liability doesn't end, even if you make a particular cost estimate. It doesn't pertain to the actual responsibility. That goes on as long as, for the potentially responsible parties, it goes on as long as contamination remains.

MS. KATERS: What about if the companies cash out?

MR. HAHNENBERG: That's a hypothetical, but normally in those kind of

cash-outs, there is a major premium that would be involved. In other words, there would be an extra offer built into kind of a settlement, that they wouldn't cash out just the amount of the cost estimates. There would be an additional premium. Normally for those kind of settlements usually that is what happens.

There is an additional premium that is included in that kind of settlement, but I mean, that's all hypothetical. That might or might be not happening.

MR. STIEFVATER: My name is Mike
Stiefvater. It's S-t-i-e-f-v-a-t-e-r. I'm a
registered professional engineer. Because I'm
registered, I'm not allowed to mess with
technology that I'm not competent in. This is
technology that I'm absolutely not competent in.

I am familiar with weighing options. And the two options or the spectrum of options, on one end of the spectrum you have -- all the options are trial and error. Engineers, scientists don't like to hear that phrase, "trial and error." But taken at every one of our options is trial and error. Do you choose the high risk one/low cost? Or do you choose

the low risk/high cost? It's up to us.

MR. ROSE: Tim Rose. I happen to live in Appleton. I'm a health care professional. I guess I'm a little concerned that there hasn't been an EPA study done or you haven't gone to CDC or somebody to get the answers as to what the health implications might be in this part of the world.

Really what I want to direct my question to -- I'm not speaking for a group although I'm involved with a group -- and that's basically reopening the locks. It came to our attention in a rather short period of time that this capping was going to basically change the depth of the river. And I guess I would like to get it from the horse's mouth. What will the depth of the river be if it's capped?

MR. HILL: The capping would not be able to reduce the depth of water from that which is formally designated under the Water Resources Development Act.

MR. ROSE: Which is?

MR. HILL: Which right now,

Congressman, you know the numbers better than I do.

1 MS. FRARY: It's 18 feet right now. MR. HILL: 18 feet right now. 2 3 Senate version of the reauthorization of the WRDA Bill would reduce it to six. There is no 4 5 authorized reauthorization depth in the house 6 version of the WRDA Reauthorization Bill. 7 MR. ROSE: But is the change in the depth associated with the activity that you want 8 9 to pursue in the river? 10 MR. HILL: It's independent of any 11 decision. If the capping was to be done, it 12 could not be countered to the federally 13 authorized --14 MR. ROSE: That's not what I'm asking 15 you. If the depth of the river today is 18 16 feet -- that's the law -- assuming the law is 17 not changed and 18 feet stays the mandated 18 depth, would the procedures you're going to do 19 in the river change that depth? 20 MR. HILL: No. 21 MR. ROSE: Not at all? 22 MR. HILL: No. It couldn't be 23 designed or implemented to reduce the federally 24 authorized channel depth. 25 MR. ROSE: Just a comment to you as a

representative of the DNR. I have some real difficulty with the fact that a lot of these things haven't been communicated, at least to the level that I'm involved, by the DNR who have a representative on the Fox River Valley Authority about all these changes that were anticipated. These things just came to the fore. Probably part of the reason is a lot of times your representative doesn't show up at the meetings.

MR. HILL: I'll note that. Thanks.

MR. ABITZ: My name is Steve Abitz.

I've been a De Pere resident for 25 years now.

You know, I have got some specific questions but I have a general question, and my general question is why should we have any confidence in the EPA and DNR on this voluntary approach business? I can tell you that I was working as a forester for the paper industry in Wisconsin for 15 years. And we used the voluntary approach when we tried to manage forests in the State of Wisconsin in terms of quality. There were a lot of hardwood quality issues. And I can just say that the voluntary approach, in my estimation, never worked there and it certainly

hasn't worked in the fisheries in the Grand
Banks on the East Coast and so I don't know why
it should work here.

And I realize it's a rhetorical question but I just have an article that appeared in the Post-Crescent. The author was Doug Dougall, former chief executive of Integrated Paper Services, Incorporated, and the last paragraph says, "I question the expenditure of more than \$500 million to remove PCBs from the Fox River by dredging. Cap it and let nature and aerobic digestion take its course." So why should we have any confidence? Thank you.

MR. HILL: Could I ask you a question? I'm not sure what voluntary -- I think that was the word you used -- approach?

MR. ABITZ: Your whole approach has been voluntary from day one, voluntary meaning that you're going to represent the citizens and the paper industry, the people who are responsible for the problem, and they're going to come together. We are going to come together and we are going to make a voluntary approach. There is going to be no teeth in anything. It's just we are going to all come to some nice

agreement.

That's been going on for two decades. I'm just wondering if it hasn't -- you know, we had a Record of Decision in 2002, and now it seems we are revisiting it again. I'm just saying it doesn't seem like the voluntary approach works. It's a rhetorical question. I don't think you can really answer it. Can you?

MR. HILL: Let me try because I think it's a misrepresentation of the approach that's being used. We are following the circle of rules that Superfund is operated under.

Superfund is an enforcement program.

We are following those rules for a couple reasons. One is it lays a logical approach for assessment and determination of what a best environmental solution is. By following the approach also it means that we can move to a direct enforcement if a negotiated achievement of that plan cannot be done. So if -- no matter what the final remedy is, if the companies do not pick up the plan and implement it, the federal and state government can institute an order which is not voluntary. It's an order against the companies to implement the plan.

There is nothing voluntary about this approach.

There is a cooperative assessment of what is out there that we agreed to under a consent decree approved by a federal judge, but again, it is not voluntary. It's made in a way which we can expedite the process to get to implementation.

MS. KATERS: When I spoke of the voluntary cooperative approach, what I was speaking of is this closed-door negotiation that has extended for ten years now since Superfund was first suggested in the Fox River in 1997.

We have had ten years of negotiation, trying to find voluntary cooperation from industry.

And there's been no indication of simply taking it to court and enforcing the clean-up for 20 years, for 35 years since this problem was first described and talked about by the DNR, 35 years of not responding to a clear public health threat. The fish advisories were issued in 1976. It's been long time of negotiations.

MR. SELESKIE: My name is Mike
Seleskie. I'm the president of the University
of Wisconsin-Green Bay Student Government
Association, Student Body President. I would

like to say I've had the great fortune to live
by three fantastic rivers in my life. I grew up
on the Mississippi River. I lived on the Hudson
River as West Point cadet. Now I live on the
Fox River, going to the University of Wisconsin
Green Bay.

I know college students sometimes have the
reputation of maybe oversimplifying things and

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I know college students sometimes have the reputation of maybe oversimplifying things and living in a fanciful world. I would like to transport the entire audience to a fanciful world for a second. If there was nothing to do with money, no issue about how expensive things were going to be, what's, in a one-word answer, what's the most effective way to clean up the river? Plain blank, nothing -- what's going to help clean it up the quickest, the best?

MR. KUHNS: I'll answer it. It's remove the PCB's. It's the word "remove."

(Applause)

Clapping is great, but the thing is, you've got a lot of people that are actually -- these guys are really working hard trying to solve some unbelievably daunting problems. And so I do want to thank you guys for doing that.

But I want to mention something that kind of

goes with what you're saying. What would you do? Once you put them into a landfill, somebody is going to say that's not permanent, either.

You're right. In fact, one of the landfills that my company is working on is Fresh Kills Landfill in New York, okay. That's one of the largest landfills in the country. And that's where they put the 9/11 debris, opened it up, put it back in there. This is a mess. I mean, you can't believe the stuff that's oozing out of this thing.

PCBs are tough buggers. We can look at them in terms of a number of different ways to get rid of them and you've got to break them chemically down. And where is the Lawrence University professor? Is he up there? Get a bunch of students together, bunch of money, solve some of these problems.

But there is a lot of people working on this stuff. My company has got some knowledge of it but we are not a research firm that does this kind of research. It's very expensive and tough, but some of the things you can do is you can subject these things to strong oxidative reaction. That's rusting, basically, for steel

or something like that. But if you can break down the bounds between these things, then they start to become less harmful.

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There is things called mobility limiters.

There is a thing called activated charcoal.

It's a clipped piece of organic matter like a coconut shell or something like that. When you do that, it creates millions of little tiny holes in it and you increase the surface area in many orders of magnitude and things can get locked into these things and they can, in essence, take it out of circulation.

There is bioremediation that Jim mentioned, which is a bacterial decomposition. Bacteria can do amazing things. There's phytoremediation, vegetation associated with microorganisms and enzymes and how they consume water to catch and start breaking these things down. Photo remediation is subject to things that break down in sunlight. There's thermal remediation which is in your report, which is expensive but you're basically going to make the sand that has the stuff that PCBs adhere to in a glass, okay. It's going to last a long time. So there is a lot of things you can look at.

now.

One thing -- and you as a professor would know this -- one thing that happens in science is just when you think there is no new ideas, some guy will come up with an idea that's just -- wow, that's amazing, you know. And we see this every day in environmental sciences. Every day somebody is figuring out, you know, we didn't know that last year and we can do that

So I would urge you to urge everyone -- I urge you guys to really consider it instead of capping; getting the stuff out of the river.

It's more expensive but you'll be heroes.

You'll also be able to apply it to a lot of different places. It's a cool thing to do.

CONGRESSMAN KAGEN: I do have to run, but I'd like you to continue asking questions.

And I cannot thank the panelists enough. I'd like to give you a round of applause for being here. (Applause).

It is another nice day in Wisconsin to have to come inside the first day of fishing.

Really, the health of our river will determine both human health and also the health of our local economy. And you cannot separate

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the health of our river from our human health. We are, after all, tied to our environment in many, many different ways. I'm absolutely convinced that by working together, this panel, our community and our universities will find better ways of solving these very complex problems and I want to thank you, and I apologize for leaving early.

Now, about the written record, once it's compiled and all of your questions have been answered -- and if time does not allow today, submit them in writing -- each of the panelists have agreed to write their answers. We have agreed to put it on our Congressional site, make it available for everyone.

Thank you for being here, your attention to helping us to make this the greatest place in America to live. Thank you Jim, Greg, Roger, Rebecca. Thank you very much.

MR. APPEL: My name is Bill Appel.

My wife Kathy and I live in the area here in

Green Bay that, as Dr. Kagen told us all today,

is a hot spot for breast cancer and that

distressing, alarming fact we did not learn this

afternoon from Dr. Kagen. It was kind of

whispered to us by health care providers some time ago, almost like, "Shusssh, don't tell anybody." But I suppose that has more to do than with just the water that goes by our place where we reside; the air we breathe, too.

I am hoping you all recognize the extraordinary act of political leadership and courage it is for Dr. Kagen to reopen this question that seemed to be cooked and settled. And I hope you all understand there is going to be massive financial political muscles used against it. Thank you.

And Senator Cowles is here. He's been a long and hard worker for environmental issues in our state legislature and I hope you all appreciate that.

My question has to do with Superfund. Maybe direct it to Dr. Kuhns. It's a simple question, and something Mr. Hill said earlier made me question the facts, but my understanding this is not a Superfund project. My question is, from your experience worldwide is the problem presented here in the Fox River of sufficient magnitude to be justified a Superfund project, and if it is, what can we as citizens do to

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encourage those in local government, state government and federal government to ask for Superfund status? And I understand if the money comes, it gets done faster. An I wrong about that?

MR. KUHNS: Technically is this a Superfund site? Well, I think we have a kind of a Superfund situation and I think we start splitting hairs if you're not going to call it a Superfund site.

There are a lot of Superfund sites that were defined in a variety of categories, and this one, in essence, has been known for so long, I think a lot of the political engines that see this kind of got used to it.

When Dr. Kagen was running for Congress and all the other people he was running against, I went around to every single candidate that was running for Republican or Democrat, Independent, Green Party that was running for Congress, and I gave them the same 45-minute presentation, what I saw was environmental challenges in Wisconsin, okay.

Dr. Kagen and two of the other candidates that obviously didn't win, out of the nine I

talked to, only three listened and responded, okay. That tells you something about the awareness, the interest, and the doability of some of these projects.

So yes, this is a Superfund site. Is it technically a Superfund site? Not technically, but maybe you can comment on that Greg, or Jim. But to me, we have got decades of situations. We have a continuing health concern that is not yet fixed. So this is as serious as some of the other stuff we see in our environment.

MR. HILL: It's not a Superfund site. It has all the characteristics of a Superfund site. It was nominated to be a Superfund site and it's probably one letter away from being designated as a National Priority List site which is what actually -- when you talk about Superfund sites, it has to be listed on the National Priority List.

I think you may be wrong in your assumption that designating this formally as an NPL site would create any benefit. The theory behind Superfund was that there was actually a fund with dollars in it, that if it was a Superfund site and if there was not cooperation and

movement, DNR and EPA could issue an order against the companies to clean up the site. If after years of litigation or negotiation they did not accept the responsibility, and if there were funds in the Superfund, EPA and DNR could institute the clean-up action on their own.

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The benefit the legislation provides is that if the government would start to use Superfund, then the companies would have to pay triplicate damages or triplicate costs. If you listen to what I just said, there are about three "if's", none of which are real. There is no benefit to designating this as a Superfund site from the standpoint of trying to move this thing more quickly because there are no funds sufficient to start implementing the clean-up plan.

MS. KATERS: The reason there are no funds is because in '94 and '95, Republicans in Congress eliminated the surcharge that had created the fund. There used to be a surcharge on all chemical and oil feedstocks in this country. And that's where the fund came from. There were billions of dollars in that fund and it was used for hazardous waste clean-ups all over the country.

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They eliminated it so the fund gradually diminished, didn't get replenished until in 2003, the program went bankrupt. So now, all the Superfund projects you hear about going on now are funded by taxpayers.

We need to get back to that surcharge so that we have a back-up funding of money to pay for Superfund clean-up in this country, paid for by those who create hazards.

MR. HAHNENBERG: In clarification here, if there is not an agreement with companies who are considered responsible, then what's left of the Superfund will pay for it but most projects in Superfund are done and paid for by responsible parties. That's normally the case.

In general, EPA makes an effort to have an agreement with the company for them to do it on a cooperative basis, not voluntarily exactly because there is an unspoken threat that if you don't agree, then we have other enforcement abilities. What EPA does normally at a Superfund site, if there are viable companies who are responsible we would have an agreement with them to do the work. That almost always

happens and rarely do we end up in court because generally, the companies see that it's an advantage for them to do it cooperatively, in a agreed process rather than face potential litigation in court, much larger, much more substantial actually financial liability, considering the penalties, all that kind of thing.

MR. BRAULT: My name is Jess Brault.

I'm a resident of De Pere. We live on the river actually where they're doing the dredging right now, but my question is a simple one. Who, in reality, decides whether this river is going to be dredged or capped?

And secondly, is there a list of names or people that can be contacted formally to protest and, you know, give our opinions to? Thank you.

MR. HILL: The original Record of
Decision which is the document that is the
decision document on what is done, the original
Record of Decision was signed jointly by Bruce
Baker, Deputy Water Director for the Department
of National Resources, and Rick Carl, Superfund
Director for Region 5. Those ultimately are the
two gentlemen who will be signing whatever

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amended law there is, if there is one.

And as far as who to contact, the formal comment period on the proposed plan is closed. You can send comments to Jim or I, and we can provide you e-mail addresses if you want them. And as long as the decision is still being made, we will review the comments and if they are different from previously submitted comments, as long as we can fit them into the process -- we want to get this decision made because that decision will drive the final development of the plan which will lead to an implementation.

We think that's important. We want to get there, not just the Phase I activity that's being done this year, but we would like dredging to continue in 2008 and remediation on for the next 5, 10, 15 years, whatever it takes.

Waiting to make a decision isn't going to help keep the remediation going on.

MS. KATERS: In answer to your question, I believe the true responsibility lies with Governor Doyle because the DNR is a cabinet agency. Bruce Baker works for Governor Doyle, and this is a highly political issue. It's not a technical issue. It's not based on the

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science. This is based on industry trying to get the least cost method. It's been politicized from day one. So Governor Doyle is key. Of course George W. Bush is also responsible at the federal level. Good luck there.

But political leaders, they're the ones that you need to hold accountable. These guys are on the ground doing the dirty work, but it's the politicians that have allowed this to drag on like this. We need to hold our elected officials accountable and make them basically get on with this.

MR. WOZNIAK: My name is Paul Wozniak, W-o-z-n-i-a-k, 215 South Superior, De Pere.

I speak today on the question of obstruction of evidence and protection of evidence. I'm an environmental historian on the Fox River and other parts of Wisconsin's environment. As a statistician, we try to weed through evidence so that people can learn over the long period what they have done right or wrong.

I received a notice from a colleague in the American Society from Environmental History just

yesterday expressing concern for the destruction of the federal records going on right now, according to this claim, in the enforcement and compliance sections of the EPA. It's reported that delegatees, whatever, of the Bush Administration are destroying libraries of information which are irreplaceable, being done over the objection of attorneys at the enforcement area as I read this report and without any scientific review.

Now, I believe -- I'm not saying yes or no to capping or dredging, whatever. But I'm saying nobody can make the decision and society cannot be protected in the future if the evidentiary record is destroyed or corrupted.

I would like to ask Congressman Kagen or
Senator Cowles that an archive be created of
historical records so they're not destroyed by
benign neglect or deliberate destruction,
whether these be government agency e-mails,
correspondence, even corporate e-mails. And I
don't believe -- inform me if such an archive
does exist. Inform me if the records are
protected for the future. I don't expect you to
have that answer, but on that record that

Congressman Kagen mentioned, I would like to see some response to that.

MR. POWELL: My name is Keith Powell.

I've lived for five years in Appleton. My
background overlooks the Fox River, between
Locks 1 and 2. I've a hydrology question. If
we remove these presumably millions of cubic
yards of material from the river, what effect
will it have on the Fox River water level and
Lake Winnebago also? Thank you.

MR. HILL: I have not seen the specific math of volumes and positions, so a lot of sediment will move in to fill places that have been left as holes, for instance, as a natural process and at a natural rate.

In general, the biggest concern about dredging is the destruction of habitats. You have the channel bottom habitat, you have the in-sediment habitat of the invertebrates, things like that. Then you have the shoreline habitats, the slough caves are affected by this, so we have talked about this in terms of other spheres, and I know you guys have talked about this.

So the volume of sediment we are talking

about taking off the river that has PCBs in it is small in comparison to the entire volume of the sediment that's transported by the river. You will see some ancillary erosional effects; changing habitats, destruction of habitats. And there you are, stuck with the decision: Do you destroy that habitat or do you put up with what's there?

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In this case, you've got to take the stuff out. You've got to destroy that habitat and if you can remediate it and rebuild that habitat or let it replace itself, those are decisions that would come later or would be part of this whole thing, so that's kind of my take on that.

I'm more concerned about the presence of the PCBs than what the look of the channel bottom might be as the sediment moves around.

MR. HAHNENBERG: Just one quick comment is that the overall net effect for the project would be actually deepening overall, on average, because there would be more material removed from dredging than replaced from capping.

UNIDENTIFIED SPEAKER: My name is (inaudible) and I'm a student at Lawrence

University. I was wondering about is it more expensive to do all the dredging right now or would it be more expensive in the long run if we dispense with all future costs of keeping up with the capping? How do we assume what the maintenance of capping is? Because it seems to me there is a lot of uncertainty there but if we were to sum all those future costs, maybe it's more expensive, dredging. I don't know.

MR. HAHNENBERG: The cost estimates indicate even with monitoring and maintenance, capping is the lower cost. If it goes on a hundred years as it's been estimated, the costs, that will be refined and as the design would proceed, and I indicated the responsibility, liability of the companies, responsible parties, does not end. As long as there is contamination there, companies will be liable.

There are mechanisms to ensure financial resources become available, too. There could be some discussions. That remains to be seen, how that, in fact, would occur. There are a number of large companies; no guarantee they're all going to be present. In any event, they are legally responsible.

MR. RIOPELLE: My name is James
Riopelle. I've been in construction for almost
30 years. And my questions pertain to was this
project put out to public bid? And are we privy
to copies of the contractors who bid on this?
And then I have another question after this,
please.

MR. HILL: Jim, if you're in the construction business, you know that you need a design before you can put it out to bid. It's not to design. It's still a concept level.

MR. RIOPELLE: So this is negotiable?

MR. HILL: It's not negotiated. It

is not even finalized. This is still a concept

plan that's being evaluated, whether or not to

dredge or to dredge and cap.

MR. RIOPELLE: Who is doing the work on the river now?

MR. HILL: There is two different active remediations going on right now, if that's what you're asking about, instead of the specific docket for today. The project up in Little Lake Butte Des Morts is -- the owner of that project is GW Partners. It's a group of Gladfelter and WTM, two of the responsible

parties, who hired CH2M Hill, Foth & Van Dyke and J.F. Brennan in order to accomplish the dredging. I don't know if they put it out to bid or not.

The project that is just north of the De Pere dam is being done by NCR and U.S. Paper. They went out to bid. They hired Sevenson Environmental Services and they're the ones doing the dredging right now.

MR. RIOPELLE: Where does Boldt fit in this scenario here?

MR. HILL: Boldt is hired by the

State of Wisconsin to be our technical oversight consultant to help us in the evaluation of the dredging and capping and design facets of this.

The State of Wisconsin and EPA does not have staff with the technical expertise.

Boldt has brought in experts besides Boldt employees, including Dr. Mike Palermo, a P.E., Ph.D., who worked 35 years with the Corps of Engineers and has basically written most of the current documents on developing caps in river systems; Tim Harrington, who has a dredging company out of Indiana to help us in evaluation of dredging techniques. And then there's NRT

who is a consulting engineering firm out of Pewaukee, who has experience in developing dredge plans through the Midwest.

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MR. RIOPELLE: I just have a very brief statement. Boldt has a very strong relationship with the paper mills, as everybody knows in this room, or if you don't, you will know. They started off as a contractor to the paper mills. So there is a very, very strong relationship there. And I know that Boldt has never been involved in a project like this before because I used to work for them and, Greg, you don't remember me but I used to call on you.

I have very, very serious concerns with the closed meetings, as Becky Katers has brought forth. I've heard it from other sources as well. There are threats from the paper mills that they are going to leave. P.H. Gladfelter did leave because it was better for them to go. They left because they didn't want to pay the fine. Now there's rumors that Kimberly-Clark will do the same thing, and that's why these are behind closed doors.

And I can't reveal my sources but I can tell

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you something else that I would like to talk to you, Becky, about. There is some serious problems with the Appleton water plant, and it's going to cost the people of Appleton \$15 to \$20 million to repair that water plant. And that's all.

MR. FRISK: Charlie Frisk from Green Bay, Wisconsin. And my question would go either to Greg or Jim.

Now something I think I heard at the beginning when you guys were speaking at the beginning was that part of the reason for going to the modified plan, capping combined with dredging, was strong popular support. Now I've been to two of these public hearings and I think I've heard one person speak in favor of the capping.

Now I coach 9th grade football. If these hearings were football games, I would be in danger of losing my job for illegally, unnecessarily, unfairly piling on the score. Where is this strong public support? There is lots of seats open. There is free cookies and juice, so anybody that was in favor of capping should be here. Is it phone calls or letters or

people knocking on doors? Or where is this support?

MR. HAHNENBERG: As far as I know, I never heard an agency person say there is overwhelming support for the plan. We have not said that. It's a mixed review, quite frankly. The public meeting, if you were here in December, it was two to one.

(Inaudible comments from audience.)

MR. HAHNENBERG: Look at the comments. That is I think the way it would shake out, but you could look for yourself. The transcript, by the way, from that public meeting is on the DNR website. So you can look at that, and you can get a reading kind of the level of support. The comments we have received there have also been a similar kind of mixed bag.

UNIDENTIFIED SPEAKER: Could we take a vote at the end of this meeting?

MR. HAHNENBERG: Public comment period is not meant to be a vote. It's meant to get information on the plan. If there's more information, that's fine.

UNIDENTIFIED SPEAKER: You say you have support but we don't think you do. Let's

take a vote right now.

MS. FRARY: This is just a question-and-answer period. I know that people are a little anxious. We are going to do these last questions here. I appreciate the sentiment but I don't want to cause any undue awkwardness for the panelists who have more than graciously been here, answered the questions.

UNIDENTIFIED SPEAKER: When you say you got a two-to-one, the possibility -- I mean, you've got people here that took a Saturday afternoon where they would sooner be gardening or fishing, took two-and-a-half hours out of their time to get here, and possibly where they're getting whatever the number is, is somebody goes into a paper mill, walks down the line, hands somebody a sheet, says "sign this or you're going to lose your job."

MR. HAHNENBERG: It's hard to judge the nature of the comments because there is -- a lot of comment on both sides were "for" votes, so how do you weigh those? I don't know. So that's why I hesitate to give a number. I appreciate the people coming out today.

We understand it takes their time and I

thank you for doing that. It's good to hear from people, and we look forward to hearing what peoples' concerns are. If there is new information, that may help us make the decisions.

MS. MORTARA: My name is Candace

Mortara, and you guys have alluded to new
information. You've alluded to new information
that's come forward since the last Record of
Decision. I was just wondering if you could go
into specifics as far as what that information
has been?

MR. HAHNENBERG: Sure. The predesign effort that led up to the proposed plan involved taking ten thousand sediment samples between Little Rapids and Green Bay, so we have about roughly four times the number of samples that we had before the original decision. So we had a lot more data from that context.

We also have other information from the dredging projects that have been ongoing up in Lake Butte Des Morts in terms of results, how that project has been going on, what kind of efforts need to be taken there, what kind of results we were seeing in this project.

We have other information, other capping projects that have been ongoing as well. So we looked at all that information as well as additional evaluations by engineers, other experts on the project. But we have a lot more information than we did then.

MS. KATERS: Our group has recently

MS. KATERS: Our group has recently got new information. We did hire a technical expert actually using an EPA grant, and he did a lot of review of the documents leading up to this capping plan. He reviewed technologies that are rapidly developing to detoxify sediments, not simply landfill them or cap them.

One of the most interesting ones is called soil washing. That has been used full-scale recently in Newark Bay, New Jersey and they are about to issue a report on it and I talked with the people who did that work, and they're getting very good results from removing PCBs and mercury and other very similar kind of contaminants from sediment so that you can take a more concentrated material, break it down and treat it and then have cleaner material that you can use for construction or other uses. It's a low energy alternative. It's not like the

vitrification process that requires very high temperature burns; very energy intensive, very expensive. Soil washing is less expensive and a cooler process. It's closed, also, so that you don't have volatilization of PCBs off in the air; very good technologies that are being evolved.

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And we have been very frustrated over the last 20 years that we haven't been able to get the agencies to really dig into these new technologies and to do pilot tests here of the different technologies to see if we can't get a better solution.

MR. HAHNENBERG: As to new information, just to make sure it's clear, and that is if we do also get new information in the public comment period, including things like other treatment technology, things like that, those are all things that are factored into our final decision, all the new information that we get during the comment period as well.

MS. WALDRON: My name is Maggie
Waldron. I'm a biology student at Lawrence
University.

First of all, there have been some studies

done on the health risks. You can find those in the Wisconsin Medical Journal, but my question for you is I've done a lot of research on the PCBs in Fox River sediments. It's my understanding that they're not immobile, that they move upwards at an annual rate, and how have you factored that into your capping design?

MR. HAHNENBERG: That has been looked at. It was actually looked in the original decision document where we looked at the movement of PCBs in the system, part of what we call a concept model. So that was factored into our decision earlier and will be part of this decision as well to conceptualize, consider that.

MR. COLE: My name is Dan Cole. I live in Oconto County, fish a lot on the Bay of Green Bay. It's C-o-l-e. I was wondering, the way I understood it is the DNR is going to make the final decision on the method?

MR. HILL: It will be a joint decision between DNR and EPA. We are the lead agency. DNR is the lead agency for this site.

MR. COLE: If the decision was to dredge versus the capping or the 90 percent

dredge, 10 percent cap, would the project move on at the same speed?

MR. HILL: The original plan for dredging only originally thought the dredging would be accomplished in around ten years. With the new information about the location of the PCBs and the ability to dredge, it's now been estimated that a dredge-only alternative would take between 15 and 20 years. The combination of the dredging and capping is estimated to take nine or ten years, so the proposed plan would be implemented in a shorter amount of time.

MR. COLE: I guess my question is would it begin at the same time or would the paper mills drag this out to a longer period of time if it's a more expensive plan?

MR. HILL: I don't know what the answer to that is.

MS. KATERS: One thing that has always been concerned with the speed of the clean-up is that they have to be willing to create enough crews working simultaneously in different areas of the river and that would speed up the clean-up, to have multiple crews all working at the same time and having an

adequate facility for transporting and treating the waste. It can be done faster but it takes willpower. That's what's been missing.

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MS. BAYER: My name is Gina Bayer,
Appleton native resident. I'm also an
environmental scientist. I have my own
contaminated sediment site that took me some
years to clean up dredging, but we also used
capping on one portion of it and I believe that
capping can be appropriate for certain portions
of the river, certain circumstances. Just
wanted to show you -- here is a table. There
are many people in the industry who follow
capping sites. These are all capping sites
throughout the nation and they follow how
effective they have been over the years.

Dr. Kuhns mentioned that there is always new ideas coming up. Scientists are always discovering new things. There is a second generation of capping that's coming out, and in one of the techniques they used mentioned activated carbon.

You don't always have to take the sediments out of the water to treat them. There is a type of reactive caps currently being pilot-tested

1 and have been applied in certain cases that will treat contaminants to keep it out of the system. 2 3 So I just wanted to say that I do support DNR, 4 EPA. I think they are seriously, sincerely working hard on the Fox River and they do have 5 6 support. Thanks. 7 MS. SCHABER: I'm Penny Bernard 8 Schaber. I live in Appleton, and the EPA 9 suggestion that we have nine criteria to judge things on, I'm wondering how much weight does 10 public non-acceptance of the capping plan have, 11 and how and when will the decision be made? And 12 13 when and how will it be reported so that we all

decision?

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MR. HAHNENBERG: I don't want to make a prediction as far as when the decision will be made because I'm not making it.

know who and what criteria was used to make this

In terms of how it would be presented to the public, it would be in a Record of Decision

Amendment unless we decide not to do it at all, but in any event, the public would be notified in that or in some other document when the decision was made. What was the other question?

MS. SCHABER: How does public

non-acceptance or apparent public non-acceptance, how much weight does that have?

MR. HAHNENBERG: Well, public acceptance is given weight. The real weight in terms of what we hear from the public is given to information that tells us from a technical basis if the remedy is going to be protective or not. There are other things that can be considered such as other material that comes into play. All this has to revolve around those kind of considerations. The information, the evaluation may come from the public but it has to be weighed into these other criteria no matter what the decision is.

MS. FRARY: I want to thank everyone for coming. I think it was a great event and I hope that you all had a chance to ask questions. I ask that we give our panelists a round of applause.

(Applause)

Thank you all for coming.

(Proceedings concluded at 2:15 p.m.)

STATE OF WISCONSIN )

COUNTY OF BROWN )

I, MYRNA WILLIQUETTE, a Notary Public and Registered Professional Reporter in and for the State of Wisconsin, do hereby certify that the foregoing proceedings were taken at said time and place and is a true and accurate transcript of my original machine shorthand notes.

Dated at Green Bay, Wisconsin This  $30^{\text{TH}}$  DAY of MAY, 2007.

MYRNA WILLIQUETTE, RPR, RMR

Myrna Williquette

Notary Public, State of Wisconsin My commission expires on 5/23/2010.

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